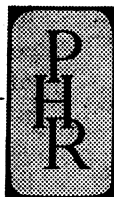


teristics, including age and education of the mother, birth order, and occupation of the father.

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## Poliomyelitis in the United States, 1951

By C. C. DAUER, M.D.

A decrease of approximately 15 percent in both the incidence of poliomyelitis and its estimated death rate in the United States in 1951 is indicated by comparison of provisional data with 1950 figures. Five thousand fewer cases were reported than in 1950, and the estimated death rate, based on a 10-percent sample, was 0.9 per 100,000 population as compared with 1.1 for 1950. (Comparative data for 1946-51 are given in table 1.)

The distribution of poliomyelitis cases by counties in 1951 is shown on the map. The largest area of relatively high incidence was centered in the Colorado-Utah-Wyoming tri-

angle, but it also included portions of adjacent States. In 1950, the area of highest incidence was adjacent to and east of this area.

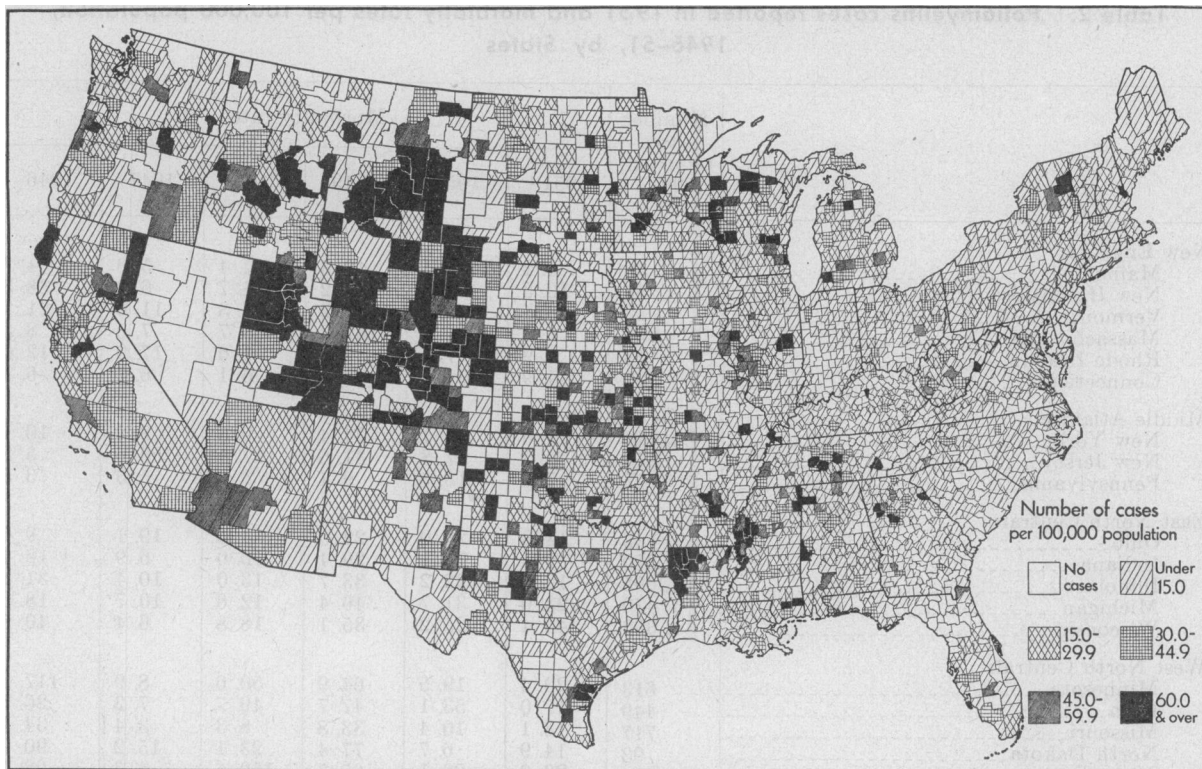
There were smaller areas of epidemicity in southeast Kansas, Wisconsin, Illinois, Missis-

Table 1. Poliomyelitis morbidity and mortality in the United States, 1946-51

Year	Number cases reported	Case rate per 100,000 population	Number deaths	Death rate per 100,000 population
1946-----	25,698	18.4	1,845	1.3
1947-----	10,827	7.6	580	.4
1948-----	27,726	19.0	1,895	1.3
1949-----	42,033	28.3	2,720	1.8
1950-----	33,303	22.0		<sup>1</sup> 1.1
1951-----	<sup>2</sup> 28,395	18.8		<sup>1</sup> .9

<sup>1</sup> Rate based on 10-percent sample of deaths. <sup>2</sup> Provisional figures.

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**Distribution of poliomyelitis in the United States, 1951.**

issippi, Louisiana, Georgia, Tennessee, and Texas. In some counties in these areas the incidence rates were comparable to those found in a few counties in the larger area.

The county having the highest incidence rate was Pueblo County, Colo.; 280 cases were reported and the rate was 310 per 100,000 population. Sunflower County, Miss., reported 148 cases, with a rate of 264; Sawyer County, Wis., reported 26 cases, with a rate of 252. Several counties in the northwestern part of Louisiana had incidence rates varying from 107 to 225 cases per 100,000 population. These rates, however, were all well below the 1950 rate of 810 in Wythe County, Va.

Cases of poliomyelitis had been reported in all the counties mentioned above in several of the years immediately prior to 1951 and in some of the counties in each of the 5 years from 1946 to 1950. Thus, relatively high rates of incidence of the disease may occur in a small area, such as a county, where the infection has been present in recognizable form in the years immediately prior to the epidemic period.

The 1951 incidence rates of poliomyelitis for the various States ranged from about 2 cases per 100,000 population in Rhode Island to 84 in Utah (see table 2). The median rate for the 48 States and the District of Columbia was 18.8, which was also the incidence rate for the United States as a whole.

Utah, Colorado, and Wyoming, the center of the largest epidemic area, were the three States having the highest incidence rates. Although relatively high, the rates in these States were much below the rates for Minnesota (117.3) in 1946 and South Dakota (150.6) in 1948, and slightly less than the rate for Idaho in 1949. Colorado had relatively high rates in 2 of the 5 years immediately preceding 1951, 75.9 in 1946 and 53.5 in 1949. In both Utah and Wyoming incidence rates were moderately high in 3 of the 5 years.

Included in the five States having the highest incidence rates in 1951 was Wisconsin, in the East North Central section, and Kansas, in the West North Central section.

**Table 2. Poliomyelitis cases reported in 1951 and morbidity rates per 100,000 population, 1946-51, by States**

	Number cases reported, 1951 <sup>1</sup>	Morbidity rates					
		1951 <sup>1</sup>	1950	1949	1948	1947	1946
<b>New England:</b>							
Maine.....	48	5.2	10.1	49.3	4.4	5.0	4.7
New Hampshire.....	55	10.3	7.1	47.2	4.7	6.2	38.3
Vermont.....	32	8.4	9.2	39.2	7.3	11.6	21.1
Massachusetts.....	293	6.2	11.0	37.3	3.7	7.5	8.5
Rhode Island.....	15	1.9	7.0	19.8	1.0	17.9	12.0
Connecticut.....	300	14.9	23.7	32.6	6.1	6.7	6.4
<b>Middle Atlantic:</b>							
New York.....	1,645	11.0	27.1	34.4	9.5	8.2	10.1
New Jersey.....	449	9.2	17.8	31.6	17.4	6.6	5.8
Pennsylvania.....	797	7.6	13.6	9.1	8.0	5.3	3.5
<b>East North Central:</b>							
Ohio.....	1,142	14.3	23.0	22.5	14.5	19.1	9.6
Indiana.....	370	9.4	15.1	29.4	10.0	6.9	12.4
Illinois.....	1,695	19.4	22.2	33.7	13.0	10.4	31.3
Michigan.....	1,470	23.0	31.7	46.4	12.6	10.7	18.6
Wisconsin.....	1,393	40.4	25.2	35.1	18.8	6.4	40.5
<b>West North Central:</b>							
Minnesota.....	613	20.4	19.5	64.9	50.6	8.9	117.3
Iowa.....	449	17.0	53.1	47.7	49.7	7.2	26.6
Missouri.....	717	18.1	10.4	33.8	8.3	3.4	34.1
North Dakota.....	93	14.9	6.7	77.4	23.1	15.2	90.9
South Dakota.....	132	20.0	29.1	65.7	150.6	4.6	68.7
Nebraska.....	436	32.6	34.2	53.0	57.7	17.0	52.6
Kansas.....	794	41.4	27.0	39.0	18.3	5.2	61.0
<b>South Atlantic:</b>							
Delaware.....	14	4.4	12.5	14.4	40.4	37.1	10.7
Maryland.....	149	6.3	30.0	13.5	8.0	6.8	5.6
District of Columbia.....	66	8.4	23.3	12.6	15.5	2.5	3.9
Virginia.....	267	8.1	36.2	10.2	17.4	5.4	4.5
West Virginia.....	299	14.9	18.7	17.7	9.4	7.7	4.2
North Carolina.....	326	8.0	18.5	5.8	65.6	8.0	4.3
South Carolina.....	125	5.9	20.3	5.5	19.4	3.4	1.1
Georgia.....	639	18.5	13.8	6.8	7.0	2.7	5.1
Florida.....	362	13.0	16.9	10.5	10.9	4.4	23.5
<b>East South Central:</b>							
Kentucky.....	339	11.5	23.4	24.0	7.1	4.4	4.2
Tennessee.....	701	21.3	17.0	16.7	11.6	5.4	6.0
Alabama.....	695	22.7	9.2	8.1	6.9	1.7	13.0
Mississippi.....	728	33.3	18.0	17.3	8.0	2.7	17.0
<b>West South Central:</b>							
Arkansas.....	462	24.2	17.6	54.1	8.1	4.6	23.2
Louisiana.....	836	31.1	15.2	8.6	6.3	2.1	14.9
Oklahoma.....	651	29.2	23.9	62.1	17.5	2.7	20.3
Texas.....	2,029	26.3	36.0	20.7	23.3	2.5	13.7
<b>Mountain:</b>							
Montana.....	139	23.2	8.0	15.7	12.1	5.2	26.1
Idaho.....	144	24.3	27.2	89.2	22.1	71.2	9.4
Wyoming.....	212	72.9	16.2	43.5	30.5	7.0	47.1
Colorado.....	1,072	80.1	15.3	53.5	10.5	5.5	75.9
New Mexico.....	148	21.4	19.4	31.0	13.3	7.0	29.9
Arizona.....	296	39.3	22.3	24.7	24.2	5.5	22.8
Utah.....	584	84.0	11.7	41.9	31.1	4.3	22.8
Nevada.....	47	29.4	15.6	15.7	13.8	5.2	11.0
<b>Pacific:</b>							
Washington.....	447	18.8	26.7	24.9	16.6	7.4	22.2
Oregon.....	368	24.1	34.1	21.8	14.8	7.6	11.1
California.....	3,312	31.3	20.9	26.1	55.2	8.5	22.1

<sup>1</sup> Provisional.